Physics of the Earth and Planetary Interiors, 45 (1987) 368–370
Elsevier Science Publishers B.V., Amsterdam – Printed in The Netherlands

CONTENTS VOLUME 45, 1987

Letter Section

Centroid-moment tensor solutions for January–March 1986
A.M. Dziewonski, G. Ekström, J.E. Franzen and J.H. Woodhouse (Cambridge, MA, U.S.A.) 1

Research Papers

Global seismicity of 1977: centroid-moment tensor solutions for 471 earthquakes
A.M. Dziewonski, G. Ekström, J.E. Franzen and J.H. Woodhouse (Cambridge, MA, U.S.A.) 11

Recent North Sea seismicity studies
L. Engell-Sørensen and J. Havskov (Bergen, Norway) 37

Shear-wave splitting above small earthquakes in the Kinki district of Japan
S. Kaneshima, M. Ando (Kyoto, Japan) and S. Crampin (Edinburgh, Gt. Britain) 45

Spherical shell tectonics: buckling of subducting lithosphere
Y. Fukao, K. Yamaoka (Nagoya, Japan) and T. Sakurai (Toyota, Japan) 59

Can depression of the core–mantle interface cause coincident Magsat and geoidal 'lows' of the Central Indian Ocean?
J.G. Negi, N.K. Thakur and P.K. Agrawal (Hyderabad, India) 68

Geoelectromagnetic measurements across the southern Senegal basin (West Africa)
M. Ritz and J. Vassal (Dakar, Senegal) 75

Palaeomagnetism of the Askøy mafic pluton (late Precambrian), West Norway; events of Caledonian metamorphic remagnetisation
K. Rother, P.R. Fluge, K.M. Storetvedt and H. Askvik (Bergen, Norway) 85

Guide for Authors 97

Special Issue: Electromagnetic Induction
Guest Editors: T.J. Shankland and O. Praus

Contents iii
Preface iv

Research Papers

Magnetotelluric measurements over the Alpha Ridge
E.R. Niblett, R.D. Kurtz and C. Michaud (Ottawa, Canada) 101

A transverse conductive structure in the northwest Himalaya
B.R. Arora and M.V. Mahashabde (Bombay, India) 119

Perturbation arrows and hypothetical event analysis in geomagnetic induction studies: experimental results from northwest India
B.R. Arora (Bombay, India) 128

Induction models of southern India and the effect of off-shore geology
M. Mareschal, G. Vasseur (Montpellier, France), B.J. Srivastava and R.N. Singh (Hyderabad, India) 137

Physics of the Earth and Planetary Interiors, 45 (1987) 368–370
Elsevier Science Publishers B.V., Amsterdam – Printed in The Netherlands

CONTENTS VOLUME 45, 1987

Letter Section

Centroid-moment tensor solutions for January–March 1986
A.M. Dziewonski, G. Ekström, J.E. Franzen and J.H. Woodhouse (Cambridge, MA, U.S.A.) 1

Research Papers

Global seismicity of 1977: centroid-moment tensor solutions for 471 earthquakes
A.M. Dziewonski, G. Ekström, J.E. Franzen and J.H. Woodhouse (Cambridge, MA, U.S.A.) 11

Recent North Sea seismicity studies
L. Engell-Sørensen and J. Havskov (Bergen, Norway) 37

Shear-wave splitting above small earthquakes in the Kinki district of Japan
S. Kaneshima, M. Ando (Kyoto, Japan) and S. Crampin (Edinburgh, Gt. Britain) 45

Spherical shell tectonics: buckling of subducting lithosphere
Y. Fukao, K. Yamaoka (Nagoya, Japan) and T. Sakurai (Toyota, Japan) 59

Can depression of the core–mantle interface cause coincident Magsat and geoidal 'lows' of the Central Indian Ocean?
J.G. Negi, N.K. Thakur and P.K. Agrawal (Hyderabad, India) 68

Geoelectromagnetic measurements across the southern Senegal basin (West Africa)
M. Ritz and J. Vassal (Dakar, Senegal) 75

Palaeomagnetism of the Askøy mafic pluton (late Precambrian), West Norway; events of Caledonian metamorphic remagnetisation
K. Rother, P.R. Fluge, K.M. Storetvedt and H. Askvik (Bergen, Norway) 85

Guide for Authors 97

Special Issue: Electromagnetic Induction
Guest Editors: T.J. Shankland and O. Praus

Contents iii
Preface iv

Research Papers

Magnetotelluric measurements over the Alpha Ridge
E.R. Niblett, R.D. Kurtz and C. Michaud (Ottawa, Canada) 101

A transverse conductive structure in the northwest Himalaya
B.R. Arora and M.V. Mahashabde (Bombay, India) 119

Perturbation arrows and hypothetical event analysis in geomagnetic induction studies: experimental results from northwest India
B.R. Arora (Bombay, India) 128

Induction models of southern India and the effect of off-shore geology
M. Mareschal, G. Vasseur (Montpellier, France), B.J. Srivastava and R.N. Singh (Hyderabad, India) 137

Interpretation of MHD-sounding data from the Kola Peninsula by the electromagnetic migration method
Ye.P. Velikhov, M.S. Zhdanov and M.A. Frenkel (Moscow, U.S.S.R.) 149
Anomalous induction zone near the eastern margin of the Bohemian Massif
V. Petr, J. Pěčová, O. Praus (Bočni, Czechoslovakia) and K. Pěč (Praha, Czechoslovakia) 161
Numerical modelling of geoelectrical structures in Czechoslovakia
V. Červ, J. Pek and O. Praus (Boční, Czechoslovakia) 170
Implications of magnetotelluric modeling for the deep crustal environment in the Rio Grande rift
G.R. Jiracek (San Diego, CA, U.S.A.), W.L. Rodi (La Jolla, CA, U.S.A.) and L.L. Vanyan (Moscow, U.S.S.R.) 179
Numerical inversion of 2D MT data by models with variable geometry
J. Pek (Spořilov, Czechoslovakia) 193
Electrical conductivity of some minerals at high temperature and for extended times
M. Laštovičková (Praha, Czechoslovakia) 204
Are there two types of conductivity anomaly (CA) caused by fluid in the crust?
A. Ádám (Sopron, Hungary) 209
Conductance map of the United States (progress report)
G.V. Keller (Golden, CO, U.S.A.) 216

Erratum 226

Announcement 227

Letter section
Centroid-moment tensor solutions for April–June 1986
A.M. Dziewonski, G. Ekström, J.E. Franzen and J.H. Woodhouse (Cambridge, MA, U.S.A.) 229
The stress–strain-rate relation for transversely isotropic, incompressible fluid
E. Mochizuki (Tokyo, Japan) 240

Research Papers
The source rupture process of the Great Banda Sea earthquake of November 4, 1963
J.L. Welc and T. Lay (Ann Arbor, MI, U.S.A.) 242
Magsat anomaly data over the Kursk region, U.S.S.R.
P.T. Taylor (Greenbelt, MD, U.S.A.) and J.J. Frawley (Dunkirk, MD, U.S.A.) 255
Experimental studies of thermal grooving in the olivine and albite melt system
M. Toriumi (Hongo, Japan) and R. Kuroda (Matsuyama, Japan) 266
Bulk moduli of wüstite and periclase: a comparative study
M. Liu and L. Liu (Canberra, A.C.T., Australia) 273
Fluidized CO_2–sulphide–silicate media as agents of mantle metasomatism and megacrysts formation: evidence from a large druse in a spinel–lherzolite xenolith
V.I. Kovalenko, I.P. Solovova, I.D. Ryabchikov, D.A. Ionov, O.A. Bogatikov, and V.B. Naumov (Moscow, U.S.S.R.) 280
Geophysical investigation of the ring structure at Zanzui, Northern Tanzania
M. Krs (Prague, Czechoslovakia), M.M. Pondaga (Dodoma, Tanzania) and B.P. Savary (Aubonne, Switzerland) 294

Book Reviews
Numerical Data and Functional Relationships in Science and Technology by K.-H. Hellwege (Editor in Chief)—W. O'Reilly 304

Seismic Migration—Imaging of Acoustic Energy by Wavefield Extrapolation A—Theoretical Aspects
by A.J. Berkhout—B.L.N. Kennett 305

Research Papers

A Seismic Equation of State II. Shear properties and thermodynamics of the lower mantle
Don.L. Anderson (Pasadena, CA, U.S.A.) 307

An experimental investigation of the pyroxene–garnet transformation in a pyrolite composition and its bearing on the constitution of the mantle
T. Irifune (Canberra, A.C.T., Australia) 324

Palaeomagnetic excursions recorded in mid-Weichselian cave sediments from Skjonghelleren, Valderøy, W. Norway
R. Løvlie (Bergen, Norway) and A. Sandnes (Kristiansund, Norway) 337

Shear modulus and internal friction of calcite rocks at seismic frequencies: pressure, frequency and grain size dependence
I. Jackson and M.S. Paterson (Canberra, A.C.T., Australia) 349

Contents of Volume 45 368